1. Divide. Then, check using multiplication. The first one is done for you.
   a. $580 \div 17$
      \[
      \begin{array}{c|ccc}
        3 & 4 & R 2 \\
        \hline
        17 & 5 & 8 & 0 \\
        - & 5 & 1 & \phantom{0} \\
        \hline
        & 7 & 0 & \phantom{0} \\
        - & 6 & 8 & \phantom{0} \\
        \hline
        & & \phantom{0} & \phantom{0} \\
      \end{array}
      \]
      \[
      \begin{array}{c}
        34 \times 17 = 578 \\
        578 + 2 = 580 \\
      \end{array}
      \]
   b. $730 \div 32$
      \[
      \begin{array}{c|cc}
        22 & R.26 \\
        \hline
        32 & 7 & 0 \\
        - & 6 & 4 & \phantom{0} \\
        \hline
        & 8 & 4 & \phantom{0} \\
        - & 8 & 4 & \phantom{0} \\
        \hline
        & & \phantom{0} & \phantom{0} \\
      \end{array}
      \]
      \[
      \begin{array}{c}
        704 + 26 = 730 \checkmark \\
      \end{array}
      \]
   c. $940 \div 28$
      \[
      \begin{array}{c|cc}
        33 & R.10 \\
        \hline
        28 & 9 & 4 \phantom{0} \\
        - & 8 & 4 \phantom{0} \\
        \hline
        & 1 & 0 \phantom{0} \\
        - & 8 & 4 \phantom{0} \\
        \hline
        & & \phantom{0} \phantom{0} \\
      \end{array}
      \]
      \[
      \begin{array}{c}
        924 + 10 = 940 \checkmark \\
      \end{array}
      \]
   d. $553 \div 23$
      \[
      \begin{array}{c|c}
        24 & R.1 \\
        \hline
        23 & 5 & 3 \\
        - & 4 & 6 \phantom{0} \\
        \hline
        & 9 & 3 \phantom{0} \\
        - & 9 & 2 \phantom{0} \\
        \hline
        & & 1 \phantom{0} \phantom{0} \\
      \end{array}
      \]
      \[
      \begin{array}{c}
        552 + 1 = 553 \checkmark \\
      \end{array}
      \]
   e. $704 \div 46$
      \[
      \begin{array}{c|c}
        15 & R.14 \\
        \hline
        46 & 0 & 4 \phantom{0} \\
        - & 4 & 6 \phantom{0} \\
        \hline
        & 4 & 4 \phantom{0} \\
        - & 4 & 4 \phantom{0} \\
        \hline
        & & 0 \phantom{0} \phantom{0} \\
      \end{array}
      \]
      \[
      \begin{array}{c}
        690 + 14 = 704 \checkmark \\
      \end{array}
      \]
2. Halle solved $664 \div 48$ below. She got a quotient of 13 with a remainder of 40. How could she use her work below to solve $659 \div 48$ without redoing the work? Explain your thinking.

\[
\begin{array}{c}
13 \\
48 \overline{664} \\
-48 \\
184 \\
-144 \\
40 \\
\end{array}
\]

\[
\begin{array}{c}
2 \\
48 \times 13 \\
144 \\
+480 \\
624 \\
\end{array}
\]

\[
\begin{array}{c}
659 \\
-624 \\
35 \\
\end{array}
\]

The answer will be 13 R 35. She will use the quotient of 13 to find that she would have grouped 624 items, so she would have 35 remaining.

3. 27 students are learning to make balloon animals. There are 172 balloons to be shared equally among the students.

a. How many balloons are left over after sharing them equally?

\[
\begin{array}{c}
27 \overline{172} \\
-162 \\
10 \\
\end{array}
\]

There will be 10 balloons remaining.

b. If each student needs 7 balloons, how many more balloons are needed? Explain how you know.

\[
\begin{array}{c}
27 \\
-10 \\
17 \\
\end{array}
\]

They need 17 more balloons. They would pass out the 10 extra and would still have 17 students that need one more balloon.